

WHAT IS CLAIMED IS:

1. An optical disk comprising a molded substrate molded by injection molding and having information marks transferred thereonto, on which a recoding film
5 capable of recording information only once by a laser beam having a wavelength of 600 nm or less is formed, and to and from which information can be recorded and reproduced, or on which a reflection film is formed so as to reproduce information from the optical disk,
10 wherein the magnitude of a double refraction component of the entire region of the optical disk is ± 60 nm or less when measured by a double pass.

2. An optical disk according to claim 1, wherein when PRML signal processing is used to reproduce the
15 information, the magnitude of the double refraction component of the entire region of the optical disk is ± 85 nm or less when measured by the double pass.

3. An optical disk according to claim 2, wherein the magnitude of the double refraction component of the
20 optical disk is ± 75 nm or less when measured by the double pass.

4. An optical disk apparatus that can record and reproduce information on and from an optical disk on which a recording film that can record information only
25 once using a laser beam having a wavelength of 600 nm or less or that can reproduce information from an optical disk on which a reflection film is formed,

wherein the magnitude of a double refraction component of the entire region of the optical disk is ± 60 nm or less when measured by a double pass.

5 5. An optical disk apparatus according to claim 4, wherein when PRML signal processing is used to reproduce the information, the magnitude of the double refraction component of the entire region of the optical disk is ± 85 nm or less when measured by the double pass.

10 6. An optical disk apparatus according to claim 5, wherein the magnitude of the double refraction component of the optical disk is ± 75 nm or less when measured by the double pass.

15 7. An optical disk comprising a molded substrate molded by injection molding and having information marks transferred thereto, on which a recoding film capable of recording and erasing information is formed, and on and from which information can be recorded and reproduced using a laser beam having a wavelength of
20 600 nm or less, wherein the magnitude of a double refraction component of the entire region of the optical disk is ± 40 nm or less when measured by a double pass.

25 8. An optical disk according to claim 7, wherein when PRML signal processing is used to reproduce the information, the magnitude of the double refraction component of the entire region of the optical disk is

± 70 nm or less when measured by the double pass.

9. An optical disk according to claim 8, wherein the magnitude of a double refraction component of the optical disk is ± 55 nm or less when measured by a
5 double pass.

10. An optical disk apparatus that can record and reproduce information on and from an optical disk on which a recording film capable of recording and erasing information using a laser beam having a wavelength of
10 600 nm or less is formed, wherein the magnitude of a double refraction component of the entire region of the optical disk is ± 40 nm or less when measured by a double pass.

11. An optical disk apparatus according to
15 claim 10, wherein when PRML signal processing is used to reproduce the information, the magnitude of the double refraction component of the entire region of the optical disk is ± 70 nm or less when measured by the double pass.

20 12. An optical disk apparatus according to claim 11, wherein the magnitude of the double refraction component of the optical disk is ± 55 nm or less when measured by the double pass.